

REMARKS

This paper is in response to the official action of July 14, 2004, wherein Claims 10, 11 and 17-19 were objected to and Claims 1-9, 12-16, and 20 were rejected.

Reconsideration is requested.

By the foregoing, Claims 1 and 12 have been amended in response to the 35 U.S.C. 112, second paragraph rejection, in order to ensure sufficient antecedent basis for the "moving machine part" and "actual operating conditions" limitations. Reconsideration and withdrawal of the indefiniteness rejections of Claims 1 and 12 are solicited.

The anticipation rejection of claims 1-9, 12-16, and 20 in view of Inoue U.S. 4,392,195 is respectfully transversed. Reconsideration is requested.

Inoue deals with a method and apparatus for controlling movement of a numerically controlled machine tool, i.e. high-precision position regulation in a drive system of the machine tool. According to Inoue, intrinsic errors (i.e., errors in displacement) of the positioning drive system (x-drive, y-drive) are compensated based on a precise direct position measurement in order to achieve a high positioning accuracy. (This type of system is described in the present application at page 3, lines 8-12, with respect to DE 34 26 863 A1, corresponding to U.S. 4,612,709, of record.)

In Inoue, the comparison between direct and indirect positions values is used for improvements in the context of position regulation of the drive system. However, there is no hint or suggestion regarding the use of the comparison position value for "disturbance sensing" in a system according to the method of the present invention.

In the sense used in the application, however, a "disturbance" is a failure or malfunction of the drive system occurring during operation of the machine tool. See page 4, lines 21-26, for example. According to one aspect, the inventive method compares the direct and indirect position measured values to record whether they fulfill a prescribed criterion in

order to determine a malfunction or failure of the drive system, such as a collision. The "error in displacement" in Inoue is not a "disturbance", but an intrinsic error present *ab initio* (such as the so-called "spindle pitch error").

Therefore, since Inoue does not show all the elements of the rejected claims, the anticipation rejection should be withdrawn.

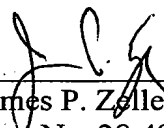
For all the forgoing reasons, it is believed that all Claims 1-20 patentably define over the cited art, and an indication to that effect is solicited.

Respectfully submitted,

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